# ERT WIRELESS DYNA LINK USER MANUAL

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## SAFE OPERATION GUIDE：

1. Do not overload this Dyna-link load guage.
2. Do not perform overhead weighing. Stay clear when Dyna-link load guage is in operation
3. Do not perform weighing under strong wind condition which may cause incorrect reading
4. Do not perform weighing under enviorment of temperature rapid changes in which may cause incorrect reading
5. Do not attempt to open this Dyna-link load guage, no user serviceable parts inside.
6. Do not remove wire rope stopper from hook. For safety reasons, always apply it.
7. Remove all loads from shackle or hook when not in used.
8. Before weighing, check and make sure that all hanging /load- receiving elements / devices are in good condition.
9. Check hook, shackle, safety pins, and latches periodically. Contact your dealer for parts replacement in case defect, deform or wearing is found.
10. Always lift loads vertically.

# CHAPTER 1 FEATURES AND SPECIFICATION

## Profile:

ERT wireless Dyna-link load guage is an extremely well-built instrument for industry use ,as a standard wireless tool offer universal applications, Whether used as conventional crane weigher or to measure force, ERT wireless Dyna-link load guage is microprocessor controlled for precision accuracy, calibration is easier with wireless indicator.

## 1. Standard Features:

- Rugged construction.
- Accuracy: 0.1% of capacity
- All fuctions and units are clearly display on the LCD (with backlighting),
- Digits are 1 inch high for easy distant viewing.
- Two user programmable Set-Point can be used for safety and warning applications or for limit weighing.
- Long battery life on 3 standard "LR6(AA)"size alkaline batteries.
- All commonly used internationally recognized units are available:kilograms(kg), short Tons(t) pounds(lb), Newton and kilonewton(kN)
- Infrared Remote control easier to calibration(with password)
- Infrared Remote control with many fuctions: "ZERO", "TARE","CLEAR", "PEAK","ACCUMULATE","HOLD","Unit Change","Voltage Check" and "Power OFF"
- 4 local mechanical keys:"ON/OFF","ZERO","PEAK" and "Unit Change".
- low battery warning.
- RF wireless palm indicator

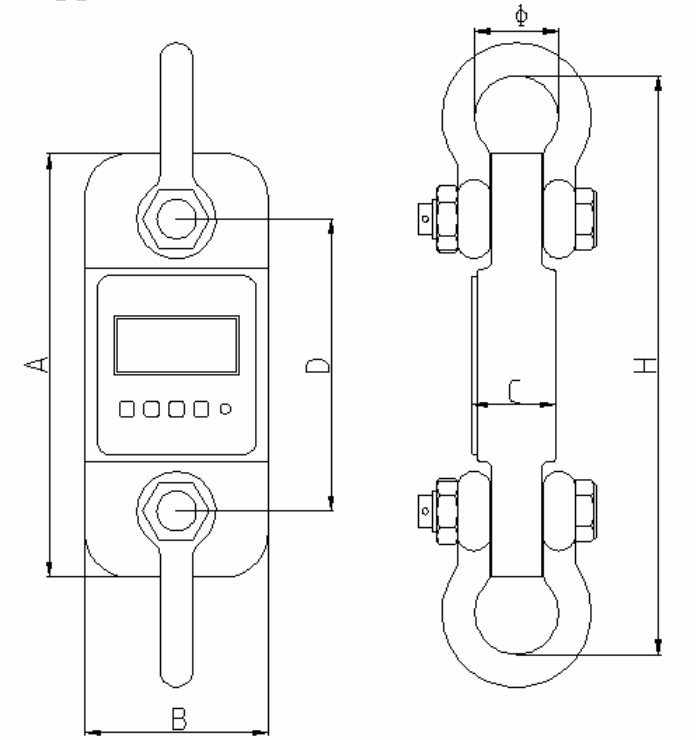
## 2. Main technical data

| | |
|---|---|
| Display | 25mm (1") 5digits LCD |
| Power on zero range | 20% F.S. |
| Manual Zero Range | 4% F.S. |
| Tare Range | 20% F.S. |
| Stable Time | ≤10 seconds |
| Overload Indication | 100% F.S. + 9e |
| Max. Safety Load | 125% F.S. |
| Ultimate Load | 400% F.S. |
| Battery Life | ≥40 hours |
| Battery Type | "LR6(AA)"size alkaline batteries. 1.5V x 3 |
| Operating Temp. | - 10℃ ~ + 40℃ |
| Operating Humidity | ≤85% RH under 20℃ |
| Wireless Distance | Min. 80m(default) [200m(optional)] |
| Wireless Frequency | 2.4GHz(default), 433MHz, 860MHz(optional) |

## 3.Specification

| MODEL | Max. capacity (kg/lb) | Min. weigh (kg/lb) | Division (kg/lb) | Total display counts (n) |
|---|---|---|---|---|
| ERT -01 | 1000 /2200 | 10 /20 | 0.5 /1 | n=2000 |
| ERT -02 | 2000 /4400 | 20/40 | 1 /2 | n=2000 |
| ERT -03 | 3000 /6600 | 20/40 | 1 /2 | n=3000 |
| ERT -05 | 5000 /11000 | 40/80 | 2/4 | n=2500 |
| ERT -10 | 10000 /22000 | 100/200 | 5 /10 | n=2000 |
| ERT -15 | 15000 /33000 | 100/200 | 5/10 | n=3000 |
| ERT -20 | 20000 /44000 | 200 /400 | 10/20 | n=2000 |
| ERT -30 | 30000/66000 | 200/400 | 10/20 | n=3000 |
| ERT -50 | 50000/110000 | 400/800 | 20/40 | n=2500 |
| ERT -100 | 100000/220000 | 1000/2000 | 50/100 | n=2000 |
| ERT -200 | 200000/440000 | 20000/4000 | 100/200 | n=2000 |

## 4.Appearance illustration




| CAPACITY | A(mm) | B(mm) | C(mm) | D(mm) | Ø(mm) | H(mm) | MATERIAL |
|---|---|---|---|---|---|---|---|
| 1000kg | 245 | 112 | 37 | 190 | 43 | 335 | Aluminium |
| 2000kg | 245 | 116 | 37 | 190 | 43 | 335 | Aluminium |
| 3000kg | 260 | 123 | 37 | 195 | 51 | 365 | Aluminium |
| 5000kg | 285 | 123 | 57 | 210 | 58 | 405 | Aluminium |
| 10000kg | 320 | 120 | 57 | 230 | 92 | 535 | Steel |
| 15000kg | 375 | 128 | 74 | 260 | 127 | 660 | Steel |
| 20000kg | 375 | 128 | 74 | 260 | 127 | 660 | Steel |
| 30000kg | 420 | 138 | 82 | 280 | 146 | 740 | Steel |
| 50000kg | 465 | 150 | 104 | 305 | 184 | 930 | Steel |
| 100000kg | 570 | 190 | 132 | 360 | 229 | 1230 | Steel |
| 200000kg | 725 | 265 | 183 | 440 | 280 | 1380 | Steel |

## 5. Power supply

Battery: “LR6(AA)”size alkaline batteries. 1.5V x 3

Current: the Dyna-link load guage average current is about DC 25mA, 3pcs new batteries can be used for about 50hours.wireless indicator average current is about DC 20mA, 4pcs new batteries can be used for about 80hours

Low battery warning: When the digits flashes, it means the battery needs to be replaced. The Dyna-link load guage or wireless indicator will power off automatically after half hours operation.

# CHAPTER 2 DISPLAY &KEY

**1. LCD DISPLAY**

a. 25mm (1'') 5digits LCD with all fuctions and units.

b. : Wireless signal,it Appear means signal stable, it disppear while signal miss.it flash means signal weak.

c. : Battery Voltage, : Full, : Low, : Empty

d. PEAK: Current value is Peak Hold value(maxmium value).

e. MEM: Appear one time when Parameter or calibration value storage. long time appearance means current value is Accumulation data.

f. STB : Stable Status.

g. kN : "kilonewton",N: "Newton".Tare status "N" will flash.

h. t : "ton".

i. lb : "pound".

j. kg : "kilogram ".

## 2. Key Area

a. ON/OFF: Power ON & Power OFF

1. Press "ON/OFF" Key 3 Second, the Dyna-link load guage turn ON.

2. In ON status, Press "ON/OFF" Key 1 Second, the Dyna-link load guage turn OFF.

**b. ZERO:**

When DYNA LINK load guage switch on with no load on the hook, but there are small digits on screen, press this key to obtain the zero reading.

**c. UNIT:**

Press UNIT key, the unit on LCD will circlely sequence change: "kg"→ "t"→ "lb" →"klb"→ "N" → "k N" → "kg" .

**d. PEAK:**

①・When weight is changing，press this key will display the maximum reading.

②・Press this key again，reading will resume changing.

# CHAPTER3

# WIRELESS INDICATOR OPERATION GUIDE

①【ＺＥＲＯ】

a.In testing status ,there are small digits on screen, press this key to obtain the zero reading.

b. In Parameter Setting status，it Used as scrolling up.

②【TARE】

a. Hang sling or container on the hook, when the reading stable, press this key, the digits display "0", and "**N**" indicator Flash.

b・Put the goods into container, the DYNA LINK will display goods net weight.

c・If move goods and container, the DYNA LINK will display minus value of tare weight.

d. In Parameter Setting status，it Used as digits movement。

③【MODE】

Used as function select，or can be combined with other Keys.

④【ENTER】

◆ Used as function select，normally combined with 【MODE】Key.

◆ Press【MODE】key once, display “OFF”, Press【ENTER】Key to realize remote power OFF。

◆ Press【MODE】key twice,display “SETUP”, Press【ENTER】Key access Parameter Setting status.Setting finish,press【MODE】key again storage data and back totest mode.

◆ Press【MODE】key 3 times,display“dC”,Press【ENTER】Key to inquire battery voltage, press【MODE】key again back to test mode.

◆ Press【MODE】key 4 times, display “Unit”, Press【ENTER】Key access unit selection. Press【ZERO】key to select unit, press【MODE】key again back to test mode.

◆ Press【MODE】key 5 times, display “ACCU”, Press【ENTER】Key access Accumulation Status, press【MODE】key again back to test mode.

◆ Press【MODE】 key 6 times, display “SACCU”, Press【ENTER】Key access Accumulation Search Status, press【MODE】key again back to test mode.

◆ Press【MODE】 key 7 times, display “clEAr”, Press【ENTER】Key access Accumulation clear Status,,display “CLr”, Press【ENTER】Key again, display “noCLr”. press【MODE】key again back to test mode.

◆ Press【MODE】 key 8 times, display “CLIBr”, Press【ENTER】Key 3 seconds, access calibration Status, if press【ENTER】key less than 3 seconds,it will back to test mode.

◆ Press【MODE】 key 9 times, display “dFuLt”, Press【ENTER】Key and【PEAK】 Key 3 secondsback to default setting.

⑤【PEAK】

①· When weight is changing，press this key will display the maximum reading.

②· Press this key again，reading will resume changing.

# CHAPTER 4 DYNA LINK FUNCTION GUIDE.

Note:( ) means the key on overlay ,【 】means the key on wireless indicator

## 1. ON/OFF

◆TURN ON Press (ON/OFF) 3seconds，display as below：

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| ON/OFF | 〖8.8.8.8.8.〗 | Display twice |
| | 〖 Ert 〗 | Display twice |
| | 〖1000.0〗 | Display twice capacity |
| | 〖U 6.XX〗 | Display current battery voltage |
| | 〖u 2.1〗 | Display current software version |
| | 〖-----〗 | Waiting stable |
| | 〖 O〗 | “STB”light on, you can operate now |

◆TURN OFF

| | | |
|---|---|---|
| 1 | Manual Power OFF | Press (ON/OFF) Key 3Seconds |
| 2 | Remote Power OFF | Press【MODE】Key select "OFF",press【ENTER】Key 3Seconds |
| 3 | Auto Power OFF | Choose turn off method when parameter setting, the scale will display〖 -〗after no operation at 15minutes to save power,and it will turn off automatically after 60minutes. |

## 2.ZERO

| | OPERATION | DISPLAY | |
|---|---|---|---|
| 1 | Press（ZERO） | 〖 0〗 | When Dynalink turn on,generally it displays〖 0〗,if display small digits when no load, press this key. |
| 2 | Press【ZERO】 | | |

## 3.TARE

| | OPERATION | DISPLAY | |
|---|---|---|---|
| 1 | Press【TARE】 | 〖 0〗 | After turn on,hanging tare weight such as sling, cable at first, press this key, "TARE" light on,then the scale will display net weight of the goods. |

## 4.PEAK HOLD

| OPERATI | ILLUSTRATION |
|---|---|
| Press (PEAK)or【PEAK】 | Display Maximum value |
| Press (PEAK)or【PEAK】again | reading will resume changing. |

## 5.ACCUMULATION

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press【MODE】key5times Then Press【ENTER】Key | 〖No***〗 | Current accumulation time |
| | 〖H****〗 | Front four digits of total value |
| | 〖L****〗 | Rear four digits of total value |

After display above contents twice, the DYNA LINK will return automatically.

## 6 · ACCUMULATION SEARCH

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press【MODE】key 6 times Then Press【ENTER】Key | 〖No.***〗 | Current accumulation time |
| | 〖*****〗 | Current weight reading |
| | 〖H****〗 | Front four digits of total value |
| | 〖L****〗 | Rear four digits of total value |
| Press 【MODE】 key again | | Return |

Press【TARE】and【ZERO】can check different times weight and accumulation.

## 7. ACCUMULATION CLEAR

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press【MODE】key 7times ThenPress【ENTER】Key | 〖 CLr 〗 | Ask if you want to clear or not |
| | 〖noCLr〗 | Press【MODE】key Cancel clear |
| | 〖8.8.8.8.8.〗 | Press【ENTER】key Confirm clear |

## 8.BATTERY VOLTAGE

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press 【MODE】 key 3 times, display"dC",press【ENTER】key. | 〖U *.**〗 | Display current battery voltage |
| Press 【MODE】 key again | | Return |

Note：Battery voltage normally between 〖U 3.50〗to 〖U 4.70〗,if below 〖U 3.10〗display will flash，Battery should be changed.

## 9. UNIT CONVERT

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press【MODE】key select "UnIt", press 【ENTER】 key. | 〖Un =00〗 | press 【ENTER】key,Unit will be changed circulate |
| Press 【MODE】 key again | | Return |

## 10. Return to normal testing status

| OPERATI | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press【MODE】keyselect "ESC", press 【ENTER】key. | | Return to normal testing status |

# CHAPTER 5
# PARAMETER SETTING & CALIBRATION.

You can use wireless indicator to operate parameter setting and cabibration

**1.Key function:**

| KE | FUNCTION |
|---|---|
| 【TARE】 | Move digits |
| 【ZERO】 | Set value up |
| 【MODE】 | Storage and exit |
| 【ENTER】 | Confirm |

**2. PARAMETER SETTING**

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press【MODE】two times | 〖SETUP〗 | Confirm, enter parameter setting program |
| Press【ENTER】 | 〖FS=06〗 | New Dyna-link，the screen display FS=06，if dyna-link calibrated，the screen display capacity. |

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| Press【ZERO】to choose | 〖FS=02〗 | Choose capacity，the screen display 02/03/05/06/10/15/20/30/50/60/75 circularly，take cap:2000kg as example, choose FS=02 |
| Press【ENTER】to confirm | 〖Id=02〗 | New Dyna-link，the screen display Id=02, if dyna-link calibrated，the screen display calibrated division. |
| Press【ZERO】to choose | 〖Id=01〗 | Choose division，the screen display 01/02/05/10/20 circularly. 2000kg Dyna-link division is 1kg, so choose Id=01 |
| | 〖Pt=0〗 | New Dyna-link，the screen display Pt=0, if Dyna-link calibrated，the screen display calibrated decimal position |
| Press【ZERO】to choose | 〖Pt=0〗 | Choose decimal position, the screen display 0/1/2/3 circularly, 0=xxxxx, 1=xxxx.x, 2=xxx.xx, 3=xx.xxx，Cap.2000kg Dyna-link choose Pt=0 |
| Press【ENTER】to confirm | 〖Ab=24〗 | Display zero range , A:zero range by hand;B:zero range automatically, 0~5 total 6 options: 0=0%F. S; 1=2%F.S; 2=4%F.S; 3=10%F.S; 4=20%F.S; 5=50%F.S Generally Don't change this |
| Press【ENTER】to confirm | 〖Cd=11〗 | New Dyna-link，the screen display Cd=11,if Dyna-link calibrated，the screen display calibrated value. |
| Press【ZERO】to confirm | 〖Cd=11〗 | C: zero-tracking range, 0~5 total 6 options; 0=0d; 1=0.5d; 2=1d; 3=1.5d; 4=2d; 5=2.5d d: display speed，0~2 total 3 options; 0=slow; 1=average; 2=fast; before calibration,set Cd=00,after calibration, set Cd=11 again, generally choose Cd==11 when ex-stock.. |
| Press【ENTER】to confirm | 〖LL=2〗 | New Dyna-link，the screen display LL=2, if dyna-link calibrated，the screen display calibrated value. |
| Press【ZERO】to choose | 〖LL=2〗 | LL：filter parameter，0~5 total 6 options， from smallest to biggest ，before calibration, set LL=0,after calibration, set LL=2 again, generally choose LL=2 when ex-stock.. |

| | | |
|---|---|---|
| Press【ENTER】to confirm | 〖Un=0〗 | New dyna-link，the screen display Un=0, if dyna-link calibrated，the screen display calibrated unit. |
| Press【ZERO】 to choose | 〖Un=0〗 | Choose unit，Un=0：kg, Un=1: lb, Un=2: N, Un=3: KN, Un=4: ton,<br>Generally, choose Un=0 when ex-stock. |
| Press【ENTER】to confirm | 〖OFF 1〗 | New dyna-link ，the screen display OFF 1,if dyna-link calibrated，the screen display calibrated value. |
| Press【ZERO】 to choose | 〖OFF 2〗 | Choose turn off method, 0~2 total 3 options; 0: turn off by hand; 1: if no operation, the screen display 〖 -〗after 15minutes to save power;2: if no operation, the screen display 〖 -〗after 15minutes, and turn off automatically after 60minutes. Generally, choose OFF=2 when ex-stock. |
| Press【ENTER】to confirm | 〖 SP1〗 | Set point 1 |
| Press【ENTER】toconfirm | 〖1 OFF〗 | New dyna-link，the screen display 1 OFF, if dyna-link calibrated，the screen display calibrated value. |
| Press【ZERO】 to choose | 〖1 LO〗 | Choose Set point 1 mode: “1 OFF” means set point 1 no function, “1 LO” is Set point 1 lower, “1 HI” is Set point 1 High |
| Press【ENTER】confirm | 〖02000〗 | New dyna-link，the screen display 02000, if<br>dyna-link calibrated，the screen display calibrated |
| Press 【ZERO】to set value, Press【TARE】to move digit | 〖02000〗 | Set “1 LO” or “1 HI” Value. |
| Press【ENTER】to confirm | 〖 SP2〗 | Set point 2 |
| Press【ENTER】toconfirm | 〖2 OFF〗 | New dyna-link，the screen display 2 OFF, if dyna-link calibrated，the screen display calibrated value. |
| Press【ZERO】to choose | 〖2 LO〗 | Choose Set point 2 mode: “2 OFF” means set point 2 no function, “2 LO” is Set point 1 low value, “2 HI” is Set point 2 High value |
| Press【TARE】to confirm | 〖02000〗 | New dyna-link，the screen display 02000, if dyna-link calibrated，the screen display calibrated value. |

| | | |
|---|---|---|
| Press 【ZERO】 to set value, Press【TARE】to move digit | 〖02000〗 | Set “2 LO” or “2 HI” Value. |
| Press【ENTER】to confirm | 〖 g〗 | acceleration of gravity |
| Press【ENTER】to confirm | 〖9.7940〗 | New dyna-link，the screen display 9.7930, if dyna-link calibrated，the screen display calibrated value. |
| Press【MODE】 | 〖 End 〗 | Confirm above parameter setting，Exit parameter setting program. |

# 3. calibration

| OPERATION | DISPLAY | ILLUSTRATION |
|---|---|---|
| | 〖 0〗 | Take Cap:2000kg Dyna-link as example，pay attention that the screen display〖 0〗 after hanging tare weight, you can hang tare weight at first, then turn on.. |
| Press 【MODE】key 8 times,display“CLIBr” Press【ENTER】Key 3 seconds,access calibration Status | 〖LoAd 〗 | No load，the screen display 0,and wait until STB display |
| Hanging standard weight 2000kg | | Waiting until STB signal on screen |
| Press【ENTER】Key | 〖02000〗 | Display capacity you choose when parameter setting，and first digit flash，Do wait until STB signal on screen. |
| Press【MODE】key to storage | 〖-------〗 | Confirm |
| | 〖 -oL- | |
| | 〖End〗 | |
| | 〖2000.0〗 | |
| Press【TARE】key to Shift digit | 〖2000〗 | Calibration end |

# CHAPTER 6 DISPLAY ILLUSTRATION

| DISPLAY | ILLUSTRATION | REMARK |
|---|---|---|
| 〖no519〗 | Without wirelsee signal | |
| 〖SEtUP〗 | Enter parameter setting | |
| 〖UAdJ 〗 | Enter voltage calibration | |
| 〖LoAd〗 | Calibration point | |
| 〖‾‾‾‾‾〗 | Exceed high limit | Tare weight can't exceed full capacity |
| 〖_____〗 | Exceed low limit | Tare weight can't be negative |
| 〖-----〗 | Waiting | |
| 〖Err10〗 | Weight less than Min. Capacity | Can't accumulate the value |
| 〖Err11〗 | Accumumated times overflow | Can't accumulate after 30times |
| 〖Err12〗 | Accumulated weight overflow | Can't accumulate after 99999 |
| 〖Err13〗 | Error in repeat accumulation | Can't accumulate one weight repeatedly |
| 〖no***〗 | Current accumulation times | |
| 〖H****〗 | Front four digit of accumulated weight | Total weight=front four digit + rare four digit |
| 〖L****〗 | Rare four digit of accumulated weight | Total weight=front four digit + rare four digit |
| 〖 CLr 〗 | Ask if you really want to delete accumulated weight | In case error deletion |
| 〖noCLr〗 | Give up deletion | |
| 〖88888〗 | Confirm deletion | |
| 〖 ‾‾‾ 〗 | Input value is too large | When you input tare or weight value |
| 〖 ____〗 | Input value is too small | When you input tare or weight value |
| 〖noACC〗 | No any accumulated content | when you check accumulation |
| 〖-oL0- 〗 | Overload warning | Tare + Net weight exceed full capacity + |
| 〖-oL1- 〗 | Overload warning | Tare + Net weight exceed full capacity |
| 〖-Lb- 〗 | Low battery warning | Turn off automatically one minute later |
| 〖U*.**〗 | The voltage of current battery | |
| 〖 End 〗 | End | when parameter setting or calibration |
| 〖 OFF 〗 | Turn off | |
| 〖Unstb〗 | Input value before STB light on | |

**NOTE: If you turn off the DYNA-LINK ,immediately turn on it , sometime it will disply 〖-oL1- 〗though it without any hanging. Just turn off it waiting few minutes.**

# CHAPTER 7 TROUBLESHOOTING GUIDE

| PROBLEM | POSSIBLE CAUSE | SOUTION |
|---|---|---|
| No display | Defective battery | Replace |
| | Defective button | Requires authorized service |
| | Power button not properly depressed | Press ON/OFF key firmly in three seconds |
| Digits flash | Low battery | Recharge the battery |
| Display doesn't respond to load changes | Faulty loadcell or PCB | Requires authorized service |
| | Out of calibration | Re- calibration |
| Display experiences excessive Zero drift between weighment | DYNA LINK do not stabilize after turning on | After turning on, heating 3-5 minutes. |
| Displayed weight shows large error | DYNA LINK not Zeroed before applying weight | Depress ZERO before applying weight |
| | Requires recalibration | See calibration |
| | Kg/lb wrong selecion | See operation |
| Wireless distance shortened | Wireless indicator's battery is low | Replace battery. |